

Add new claims 29-54.

Sub B1

29. A method of producing polyvinyl alcohol polymer comprising:
saponification of a polyvinyl ester in an alcohol-containing organic solvent under the presence of a saponification catalyst,
wherein saponification is carried out while distilling off the carboxylic acid ester produced by the saponification reaction.

30. The method of Claim 29, wherein saponification comprises:
a primary saponification reaction, in which saponification is carried out by mixing the polyvinyl ester in an alcohol-containing organic solvent under the presence of a saponification catalyst, and
a subsequent secondary saponification reaction, in which saponification is carried out while distilling off the carboxylic ester that is produced.

Sub B2

31. The method of Claim 30, wherein the degree of saponification attained in said primary saponification reaction is 70 mole % or more and the concentration of the polyvinyl alcohol polymer in the saponification reaction solution is 10 wt% or more.

32. The method of Claim 30, wherein the degree of saponification attained in said secondary saponification reaction is 85 mole % or more and the concentration of the polyvinyl alcohol polymer in the saponification reaction solution is 10 wt% or more.

33. The method of Claim 30, wherein said saponification reaction comprises:
a first stage saponification process, comprised in turn of a primary saponification reaction, in which a saponification reaction is carried out by mixing the polyvinyl ester in the alcohol-containing organic solvent under the presence of a saponification catalyst and
a subsequent secondary saponification reaction, in which a saponification reaction is carried out while distilling off the carboxylic ester that is produced; and

Sub B2
cont.

a subsequent second stage saponification process, comprised in turn of a primary saponification reaction, in which a saponification reaction is carried out by mixing the polyvinyl ester in the alcohol-containing organic solvent under the presence of a saponification catalyst and

a subsequent secondary saponification reaction, in which a saponification reaction is carried out while distilling off the carboxylic ester that is produced.

34. The method of Claim 33, wherein in said primary saponification reaction of the first stage, the degree of saponification attained is 70 mole % or more and the concentration of the polyvinyl alcohol polymer in the saponification reaction solution is 10 wt% or more.

35. The method of Claim 33, wherein in said secondary saponification reaction of the first stage, the degree of saponification attained is 85 mole % or more and the concentration of the polyvinyl alcohol polymer in the saponification reaction solution is 10 wt% or more.

36. The method of Claim 33, wherein in said primary saponification reaction of the second stage, the degree of saponification attained is 93 mole % or more and the concentration of the polyvinyl alcohol polymer in the saponification reaction solution is 10 wt% or more.

37. The method of Claim 33, wherein in said secondary saponification reaction of the second stage, the degree of saponification attained is 99 mole % or more and the concentration of the polyvinyl alcohol polymer in the saponification reaction solution is 10 wt% or more.

38. The method of Claim 29, wherein saponification while distilling off said carboxylic acid ester is carried out in substantially a piston-flow type reactor.

39. The method of Claim 38, wherein said reactor is a tower type reactor.

748C
740C
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DPW
DWW

40. The method of Claim 39, wherein said tower ~~type~~ reactor is a packed tower or tray tower. DRW

41. The method of Claim 29, wherein saponification is carried out in a heat-exchanging type reactor.

42. The method of Claim 41, wherein said heat-exchanging type reactor is selected from the group consisting of: a platefin ~~type~~ evaporator, a falling film evaporator, and a shell and tube ~~type~~ evaporator. new
new

Sub B3 43. The method Claim 30, wherein said primary saponification reaction is carried out in substantially a complete mixing type reactor.

44. The method of Claim 30, wherein said reactor is a kneader ~~type~~ mixer. DRW

45. The method of Claim 33, wherein said secondary saponification reaction of the second stage is carried out in a shell and tube evaporator.

46. The method of Claim 29, wherein the intrinsic viscosity of said polyvinyl ester is 1.4dl/g or more.

47. The method of Claim 29, wherein said polyvinyl ester is polyvinyl acetate.

Sub B4 48. The method of Claim 29, wherein said alcohol-containing organic solvent comprises at least one type of solvent selected from the group consisting of dimethyl sulfoxide, dimethylformamide, dimethylacetamide, N-methylpyrrolidone, ethylenediamine, and diethylenetriamine.

49. The method of Claim 48, wherein said organic solvent comprises dimethyl sulfoxide.

50. The method of Claim 29, wherein said alcohol-containing solvent comprises methanol.